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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,145

03/10/2004

Ihab M. Hekal

IHP0304

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25628

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07/13/2005

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EXAMINER

JOHNSON, EDWARD M

ART UNIT

PAPER NUMBER

1754

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,145

Applicant(s)

HEKAL, IHAB

Examiner

Edward M. Johnson

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1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. US 5,241,149.

Regarding claims 1 and 13, Watanabe '149 discloses an oxygen absorber comprising iron powder main agent (see column 7, lines 34-37) and iron chloride absorber (see column 7, lines 56-58).

Watanabe fails to disclose a coated first layer.

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a coated first layer of the iron chloride absorber in Watanabe because Watanabe discloses laminated layers of microwave-proof and packing material as preferable for safety and health (see column 7, lines 13-18), which would obviously, to one of ordinary skill, suggest the coating configuration of

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the disclosed iron chloride absorber on the disclosed iron powder main agent.

Regarding claim 2, Watanabe '149 discloses the iron powder as filler (see column 49-50).

Regarding claim 3, Watanabe '149 discloses multiple pores (see column 4, lines 25-28).

Regarding claims 4-5 and 7-8, Watanabe '149 discloses a film thickness of 5-20 microns and 1% NaCl (Example 1), which would at least suggest a powder diameter of less than 20 microns and 0.1-10% iron chloride.

Regarding claims 6 and 12, Watanabe '149 discloses ferrous and ferric chloride (see column 7, lines 56-58).

Regarding claim 9, Watanabe '149 discloses polyethylene and polypropylene (see column 5, lines 26-68 and Example 1).

Regarding claim 10, Watanabe '149 discloses 98.5% iron powder (see Example 1), which would at least suggest about 90%.

Regarding claims 11 and 16, Watanabe '149 discloses laminated layers of microwave-proof and packing material as preferable for safety and health (see column 7, lines 13-18).

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe '149 as applied to claim 13 above, and further in view of Teumac et al. US 6,465,065.

Watanabe fails to disclose extruding and pelleting.

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Teumac '065 discloses pelleting and extruding (see Example 2 and column 10, lines 16-20)

It is considered that it would have been obvious to one of ordinary skill to employ the pelleting and extruding of Teumac in the method of making an oxygen absorber of Watanabe because Teumac discloses the steps in a method for making an oxygen scavenger (title) to apply to a wide variety of jar lids and caps for retaining food substances (see column 10, lines 20-22).

Allowable Subject Matter

4. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not disclose or suggest injecting hydrochloric acid or molten ferric chloride hexahydrate to react directly with the iron powder in the method of manufacturing an oxygen absorber of the instant claim 15.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chiang et al. US 6,369,148 discloses an oxygen-scavenger and method of making

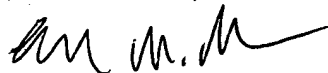
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thereof comprising impregnating iron chloride onto a carrier
(see abstract and Examples).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edward M. Johnson
Examiner
Art Unit 1754

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